

This Page Is Inserted by IFW Operations  
and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problems Mailbox.**

# SEQUENCE LISTINGS

SEQ ID NO	CLONE NAME	SEQUENCE
SEQ ID NO: 1	405 (pumilus)	ATGAAATTTGTAAAAAGAAGGATCATTGCACT TGTAACAATTTTGGTGCTGTCAGTCACATCGC TGTTTGCGATGCAGCCGTCAGCAAAAGCCGCT GAACACAATCCAGTTGTTATGGTTCACGGTAT CGGAGGAGCTTCATACAATTTTGCGGGAATTA AGAGCTATCTCGTATCTCAGGGCTGGTACGG GGCAAGCTGTATGCGGTTGATTTTGGGACAA GACAGGGACGAATTATAACAATGGCCCGGTAT TATCACGATTTGTGCAAAAGGTTTATAGACGAA ACGGGTGCGAAAAAAGTGGATATTGTCGCTCA CAGTATGGGTGGCGCGAACACACCTTACTACA TAAAAATCTGGACGGCGGAAATAAAATTGAA AACGTCGTAAACGCTTGGCGGCGCGAACCGTTC GACGACAAGCAAGGCGCTTCCGGGAACAGATC CAAATCAAAAGATTTTATACACATCCATTTAC AGCAGTGCCGATATGATTGTCATGAATTACTT ATCAAAATTAGACGGTGCTAAAAACGCTCAAA TTCATGGCGTTGGGCACATTGGTTTATTGATG AACAGCCAAGTCAACAGCCTGATTAAAGAAGG ACTGAACGGCGGGGGGCCAAAATACGAATTAA
SEQ ID NO: 2	406 (subtilis)	ATGAAATTTGTAAAAAGAAGGATCATTGCACT TGTAACAATTTTGTATGCTGTCTGTTACATCGC TGTTTGCGTTGCAGCCGTCAGCAAAAGCCGCT GAACACAATCCAGTCGTTATGGTTCACGGTAT TGGAGGGGCATCATTCAATTTTGCGGGAATTA AGAGCTATCTCGTATCTCAGGGCTGGTTCGCGG GACAAGCTGTATGCAGTTGATTTTGGGACAA GACAGGCACAAATTATAACAATGGACCGGTAT TACCACGATTTGTGCAAAAGGTTTATAGATGAA ACGGGTGCGAAAAAAGTGGATATTGTCGCTCA CAGCATGGGGGGCGCGAACACACTTTACTACA TAAAAATCTGGACGGCGGAAATAAAGTTGCA AACGTCGTGACGCTTGGCGGCGCGAACCGTTT GACGACAGGCAAGGCGCTTCCGGGAACAGATC CAAATCAAAAGATTTTATACACATCCATTTAC AGCAGTGCCGATATGATTGTCATAAATTACTT ATCAAGATTAGATGGTGCTAGAAACGTTCAAA TCCATGGCGTTGGACACATCGGCCTTCTGTAC AGCAGCCAAGTCAACAGCCTGATTAAAGAAGG GCTGAACGGCGGGGGACTCAATACAAATTAG
SEQ ID NO: 3	402 (megaterium)	ATGAAATTTGTAAAAAGAAGGATCATTGCACT TGTAACAATTTTGGTGCTGTCAGTCACATCGC TGTTTGCGATGCAGCCGTCAGCAAAAGCCGCT GACACAATCCAGTTGTTATGGTTCACGGTAT

		CGGAGGAGCTTCATACAATTTTGCGGGAATTA AGAGCTATCTCGTATCTCAGGGCTGGTCACGG GGCAAGCTGTATGCGGTTGATTTTTTGGGACAA GACAGGGACGAATTATAACAATGGCCCGGTAT TATCACGATTTGTGCAAAAGGTTTTAGACGAA ACGGGTGCGAAAAAAGTGGATATTGTTCGCTCA CAGCATGGGTGGCGCGAACACACTTTACTACA TAAAAAATCTGGACGGCGGAAATAAAATTGAA AACGTCGTAACGCTTGGCGGCGCGAACCGTTT GACGACAAGCAAGGCGCTTCCGGGAACAGATC CAAATCAAAAGATTTTATACACATCCATTTAC AGCAGTGCCGATATGATTGTCATGAATTACTT ATCAAAATTAGACGGTGCTAAAAACGTTCAAA TTCATGGCGTTGGGCACATTGGTTTATTGATG AACAGCCAAGTCAACAGCCTGATTAAAGAAGG ACTGAACGGCGGGGGCCACAATACAAATTAA
SEQ ID NO: 4	400 (lentus)	ATGAAATTTGTAAAAAGAAGGATCATTCGACT TGTAACAATTTTGGTGCTGTCAGTCACATCGC TGTTTTCGATGCAGCCGTCAGCAAAAGCCGCT GAACACAATCCAGTTGTTATGGTTCACGGTAT CGGAGGAGCTTCATACAATTTTGCGGGAATTA AGAGCTATCTCGTATCTCAGGGCTGGTCACGG GGCAAGCTGTATGCGGTTGATTTTTTGGGACAA GACAGGGACGAATTATAACAATGGCCCGGTAT TATCACGATTTGTGCAAAAGGTTTTAGACGAA ACGGGTGCGAAAAAAGTGGATATTGTTCGCTCA CAGCATGGGTGGCGCGAACACACTTTACTACA TAAAAAATCTGGACGGCGGAAATAAAATTGAA AACGTCGTAACGCTTGGCGGCGCGAACCGTTT GACGACAAGCAAGGCGCTTCCGGGAACAGATC CAAATCAAAAGATTTTATACACATCCATTTAC AGCAGTGCCGATATGATTGTCATGAATTACTT ATCAAAATTAGACGGTGCTAAAAACGTTCAAA TTCATGGCGTTGGGCACATTGGTTTATTGATG AACAGCCAAGTCAACAGCCTGATTAAAGAAGG ACTGAACGGCGGAGGACTAAATACAAATTAA
SEQ ID NO: 5	396 (circulans)	ATGAAATTTATAAAAAGAAGGATCATTCGACT TGTAACAATTTTGGTGCTGTCAGTCACATCGC TGTTTTCGATGCAGCCGTCAGCAAAAGCCGCT GAACACAATCCAGTTGTTATGGTTCACGGTAT CGGAGGAGCTTCATACAATTTTGCGGGAATTA AGAGCTATCTCGTATCTCAGGGCTGGTCACGG GGCAAGCTGTATGCGGTTGATTTTTTGGGACAA GACAGGGACGAATTATAACAATGGCCCGGTAT TATCACGATTTGTGCAAAAGGTTTTAGACGAA ACGGGTGCGAAAAAAGTGGATATTGTTCGCTCA CAGCATGGGTGGCGCGAACACACTTTACTACA

		TAAAAAATCTGGACGGCGGAAATAAAATTGAA AACGTCGTAACGCTTGGCGGCGCGAACCCTTT GACGACAAGCAAGGCGCTTCCGGGAACAGATC CAAATCAAAAGATTTTATACACATCCATTTAC AGCAGTGCCGATATGATTGTCATGAATTACTT ATCAAAATTAGACGGTGCTAAAAACGTTCAAA TTCATGGCGTTGGGCACATTGGTTTATTGATG AACAGCCAAGTCAACAGCCTGATTAAAGAAGG ACTGAACGGCGGGGGCCTCAATACAAATTAA
SEQ ID NO: 6	392 (azotoformans)	ATGAAATTTGTAAAAAGAAGGATCATTGCACT TGTAACAATTTTGGTGCTGTCAGTCACATCGC TGTTTGCGATGCAGCCGTGAGCAAAAGCCGCT GAACACAATCCAGTTGTTATGGTTCACGGTAT CGGAGGAGCTTCATACAATTTTGCGGGAATTA AGAGCTATCTCGTATCTCAGGGCTGGTCACGG GGCGAGCTGTATGCGGTTGATTTTTTGGGACAA GACAGGGACGAATTATAACAATGGCCCCGGTAT TATCACGATTTGTGCAAAAGGTTTTAGACGAA ACGGGTGCGAAAAAAGTGGATATTGTCGCTCA CAGCATGGGTGGCGCGAACACACTTTACTACA TAAAAAATCTGGACGGCGGAAATAAAATTGAA AACGTCGTAACGCTTGGCGGCGCGAACCCTTT GACGACAAGCAAGGCGCTTCCGGGAACAGATC CAAATCAAAAGATTTTATACACATCCATTTAC AGCAGTGCCAATATGATTGTCATGAATTACTT ATCAAAATTAGACGGTGCTAAAAACGTACAAA TTCATGGCGTTGGGCACATTGGTTTATTGATG AACAGCCAAGTCAACAGCCTGATTAAAGAAGG ACTGAACGGCGGGGGCCTAGATACAAATTAA
SEQ ID NO: 7	398 (firmus)	ATGAAATTTGTAAAAAGAAGGATCATTGCACT TGTAACAATTTTGGTGCTGTCAGTCACATCGC TGTTTGCGATGCAGCCGTGAGCAAAAGCCGCT GAACACAATCCAGTTGTTATGGTTCACGGTAT CGGAGGAGCTTCATACAATTTTGCGGGAATTA AGAGCTATCTCGTATCTCAGGGCTGGTCACGG GGCAAGCTGTATGCGGTTGATTTTTTGGGACAA GACAGGGACGAATTATAACAATGGCCCCGGTAT TATCACGATTTGTGCAAAAGGTTTTAGACGAA ACGGGTGCGAAAAAAGTGGATATTGTCGCTCA CAGCATGGGTGGCGCGAACACACTTTACTACA TAAAAAATCTGGACGGCGGAAATAAAATTGAA AACGTCGTAACGCTTGGCGGCGCGAACCCTTT GACGACAAGCAAGGCGCTTCCGGGAACAGATC CAAATCAAAAGATTTTATACACATCCATTTAC AGCAGTGCCGATATGATTGTCATGAATTACTT ATCAAAATTAGACGGTGCTAAAAACGTCAAA TTCATGGCGTTGGGCACATTGGTTTATTGATG

		AACAGCCAAGTCAACAGCCTGATTAAAGAAGG ACTGAACGGCGGAGGCCACAATACAAATTAA
SEQ ID NO: 8	393 (badius)	ATGAAATTTGTAAAAAGAAGGATCATTGCACT TGTAACAATTTTGGTGCTGTCAGTCACATCGC TGTTTGCGATGCAGCCGTCAGCAAAAGCCGCT GAACACAATCCAGTTGTTATGGTTCACGGTAT CGGAGGAGCTTCATACAATTTTGCGGGAATTA AGAGCTATCTCGTATCTCAGGGCTGGTCACGG GGCAAGCTGTATGCGGTTGATTTTTTGGGACAA GACAGGGACGAATTATAACAATGGCCCCGGTAT TATCACGATTTGTGCAAAAGGTTTTAGACGAA ACGGGTGCGAAAAAAGTGGATATTGTCGCTCA CAGCATGGGTGGCGCGAACACACTTTACTACA TAAAAAATCTGGACGGCGGAAATAAAATTGAA AACGTCGTAAACGCTTGGCGGCGCGAACCGTTT GACGACAAGCAAGGCGCTTCCGGGAACAGATC CAAATCAAAAGATTTTATACACATCCATTTAC AGCAGTGCCGATATGATTGTCATGAATTACTT ATCAAAATTAGACGGTGCTAAAAACGTTCAAA TTCATGGCGTTGGGCACATTGGTTTATTGATG AACAGCCAAGTCAACAGCCTGATTAAAGAAGG ACTGAACGGCGGAGGCCACAATACAAATTAA
SEQ ID NO: 9	Dc5h	ATGAAATTTGTAAAAAGAAGGATCATTGCACT TGTAACAATTTTGTATGCTGTCTGTTACATCGC TGTTTGCGTTGCAACCGTCAGCAAAAGCCGCT GAACACAATCCAGTCGTTATGGTTCACGGTAT TGGAGGGGCATCATTCAATTTTGCGGGAATTA AGAGCTATCTCGTATCTCAGGGCTGGTCGCGG GACAAGCTGTATGCAGTTGATTTCAAGGACAA GACAGGCACAAATTATAACAATGGCCCCGGTAT TATCACGATTTGTGCAAAAGGTTTTAGATGAA ACGGGTGCGAAAAAAGTGGATATTGTCGCTCA CAGCATGGGGGGCGCGAACACACTTTACTACA TAAAAAATCTGGACGGCGGAAATAAAGTTGAA AACGTCGTGACGCTTGGCGGCGCCAACCGTTT GACGACAGGCAAGGCGCTTCCGGGAACAGATC CAAATCAAAAGATTTTATACACATCCATTTAC AGCAGTGCCGATATGATTGTCATGAATTATTT ATCAAGATTAGATGGTGCGAGAAACGTTCAAA TCCATGGCGTTGGACACATCGGCCTTCTGTAC AGCAGCCAAGTCAACAGCCTGATTAAAGAAGG GCTGAACGGCGGGGGCCTCAATACAAATTAA
SEQ ID NO: 10	Dc5f	ATGAAATTTGTAAAAAGAAGGATCATTGCACT TGTAACAATTTTGTATGCTGTCTGTTACATCGC TGTTTGCGTTGCAACCGTCAGCAAAAGCCGCT GAACACAATCCAGTCGTTATGGTTCACGGTAT TGGAGGGGCATCATTCAATTTTGCGGGAATTA

		AGAGCTACCTCGTATCTCAGGGCTGGTCGCGG GACAAGCTGTATGCAGTTGATTTCTAAGACAA AACAGGGAATAACCGCAACAATGGTCCGCGTC TATCGAGATTCGTCAAAGATGTGTTAGACAAA ACGGGTGCCAAAAAAGTAGATATTGTGGCTCA TAGTATGGGTGGAGCGAACACGCTATACTATA TCAAGAATCTAGATGGCGGCGATAAAAATTGAG AACGTTGTCACAATTGGTGGAGCAAACGGACT CGTTTCAAGCAGAGCATTACCAGGCACAGATC CAAATCAAAAAAATTCTTTACACATCCGTCTAT AGCTCAGCAGATCTTATTGTCTCAACAGCCT CTCTCGTTTAATTGGCGCAAGAAACATCCTGA TCCATGGCGTTGGTCATATCGGTCTATTAACC TCAAGCCAAGTGAAAGGGTATATTAAAGAAGG ACTGAACGGCGGAGGCCTCAATACAAATTAA
SEQ ID NO: 11	Dc5c1	ATGAAAGTGATTTTTTGTTAAGAAAAGGAGTTT GCAAATTCTTGTTGCCCTTGCCTTAGTGCTAG GTTCAATAGCCTTCATCCAGCCGAAAGAAGCC AAAGCGGCTGAGCATAATCCGGTTGTAATGGT GCATGGCATGGGTGGTGCCTTATAACTTTG CTTCGATCAAACGATACTTAGTATCACAGGGA TGGGATCAAACCAACTTTTTGCAATCGATTT CATAGACAAAACAGGCAATAACCTAAACAATG GCCCCAGGCTCTCGAGATTTCGTGAAAGACGTA CTAGCCAAAACGGGCGCCAAAAAAGTAGATAT TGTGGCTCATAGTATGGGCGGTGCGAACACGT TATACTATATTAAAAACCTAGACGGTGGAGAT AAAATTGAAAACGTTCGTACATTAGGTGGAGC AAACGGACTCGTATCACTCAGAGCATTACCAG GCACCGATCCAAATCAAAAAATTCTTTACACA TCTGTCTATAGCTCAGCCGATCTCATTGTCTG CAACAGCCTTTTCGCGTTTAATTGGCGCAAGAA ACGTCCTGATCCACGGCGTTGGACATATCGGT CTATTAACCTCAAGCCAAGTCAAAGGCTATGT GAAAGAAGGATTGAATGGCGGGGACAGAATA CAAATTAA
SEQ ID NO: 12	Dc5a2	ATGAAAGTGATTTTTTGTTAAGAAAAGGAGTTT GCAAATTCTTGTTGTGCTTGCAATTGGTGATGG GTTCAATGGCCTTCATCCAGCCAAAAGAGATC AGAGCGGCTGAGCATAATCCGGTTGTGATGGT ACATGGCATGGGCGGTGCGTCTTATAACTTTG CTTCGATTAAAAGTTACTTGGTATCACAAAGGA TGGGATCGAAACCAATTATTTGCTATCGATTT CATAGACAAAACAGGTAATAACCGCAACAATG GTCCGCGTCTATCCAGATTTCGTCAAAGATGTG CTAGCCAAAACAGGTGCCAAAAAAGTTGATAT TGTGGCTCATAGTATGGGCGGAGCGAACACGT

		TATACTATATTAAGAATCTAGACGGCGGCGAT AAAATAGAAAACGTTGTTACACTTGGTGGAGC GAACGGACTCGTTTCACTCAGAGCATTACCAG GCACCGATCCAAATCAAAAAATCCTTTACACA TCCGTCTACAGCTCAGCCGATCTTATCGTCGT CAACAGCCTCTCGCGTTTAATTGGCGCAAGAA ACGTCCTCATTACGGCGTTGGTCACATCGGT CTATTAGCTTCAAGCCAAGTCAAAGGCTATAT CAAAGAAGGACTGAATGGCGGAGGCCAAAATA CAAATTAA
SEQ ID NO: 13	Dc512	ATGAAAGTGATTTTTGTTAAGAAAAGGAGTTT GCAAATTCTCATTGCGCTTGCATTGGTGATTG GTTCAATGGCGTTTATCCAGCCGAAAGAGGCG AAGGCGGCTGAGCATAATCCGGTTGTGATGGT GCATGGCATTGGCGGTGCCTCTTATAACTTTT TTTCTATTAAAAGTTATTTGGCCACACAAGGC TGGGATCGAAACCAATTATATGCTATTGATTT CATAGACAAAACAGGAAATAACCGCAACAATG GTCCGCGTCTATCGAGATTTCGTCAAAGATGTG TTAGACAAAACGGGTGCCAAAAAAGTAGATAT TGTGGCTCATAGTATGGGTGGAGCGAACACGC TATACTATATCAAGAATCTAGATGGCGGCGAT AAAATTGAGAACGTTGTCACAATTGGTGGAGC AAACGGACTCGTTTCAAGCAGAGCATTACCAG GCACAGATCCAAATCAAAAAATTCCTTTACACA TCCGTCTATAGCTCAGCAGATCTTATTGTTCGT CAACAGCCTCTCTCAGTTTAATTGGCGCAAGA AACATCCTGATCCAGGCGTTGGTCATATCGGT CTATTAACCTCAAGCCAAGTGAAAGGGTATAT TAAAGAAGGACTGAACGGCGGAGGCCTCAATA CAAATTAA
SEQ ID NO: 14	Sga	ATGAAATTTGTAAAAAGAAGGATCATTGCACT TGTAACAATTTTGATGCTGTCTGTTACATCGC TGTTTGCGTTGCAACCGTCAGCAAAAGCCGCT GAACACAATCCAGTCGTTATGGTTCACGGTAT TGGAGGGGCATCATTCAATTTTGCGGGAATTA AGAGCTATCTCGTATCTCAAGGCTGGTCGCGG GACAAGCTGTATGCAGTTGATTTCAGGGACAA GACAGGCAATAACTTAAACAACGGTCCAGTAT TATCGCGTTTCGTGAAAAAGGTATTAGATGAA ACCGGTGCGAAAAAAGTGGATATTGTGCTCA CAGCATGGGCGGCGCTAACACGCTTTACTACA TAAAAAATTTGGATGGCGGTAATAAAATTGAA AACGTCGTAAACACTTGGCGGCGCGAATCGTCT TGTGACAGGCAAGGCGCTTCCGGGTACTGATC CCAACCAAAGATCTTGTACACATCCGTTTAC AGTAGTGCTGATATGATTGTTATGAATTACTT

		AACAAAATTAGACGGGGCTAAAAATGTTCAAA TTCATGGTGTCTGGACATATCGGCCTTCTGTAC AGCAGCCAAGTCAACAGCCTGATTAAAGAAGG GCTTAACGGCGGAGGCCTCAATACAAATTAA
SEQ ID NO: 15	Sgc	ATGAAATTTGTAAAAAGAAGGATCATTGCACT TGTAACAATTTTGATGCTGTCTGTTACATCGC TGTTTGCGTTGCAACCGTCAGCAAAAGCCGCT GAACACAATCCAGTCGTTATGGTTCACGGTAT TGGAGGGGCATCATTCAATTTTGCGGGAATTA AGAGCTATCTCGTATCTCAGGGCTGGTCGCGG GACAAGCTGTATGCAGTTGATTTCTGGGATAA GACAGGCAATAACTTAAACAACGGTCCAGTAT TATCGCGTTTTGTGAAAAAGGTATTAGATGAA ACCGGTGCGAAAAAAGTGGATATTGTGCGCTCA CAGCATGGGCGGCGCTAACACGCTTTACTACA TAAAAAATTTGGATGGCGGTAATAAAATTGAA AACGTCGTAACACTTGCGGCGCGAATCGTCT TGTGACAGGCAAGGCGCTTCCGGGTACTGATC CCAACCAAAAGATATTGTACACATCCGTTTAC AGTAGTGCTGATATGATTGTTATGAATTACTT ATCAAAATTAGACGGGGCTAAAAATGTTCAAA TTCATGGTGTCTGGACATATCGGCCTTCTGTAC AGCAGCCAAGTCAATAGCCTGATTAAAGAAGG GCTTAACGGCGGAGGACTCAATACGAATTAA
SEQ ID NO: 16	Sgd	ATGAAATTTGTAAAAAGAAGGATCATTGCACT TGTAACAATTTTGATGCTGTCTGTTACATCGC TGTTTGCGTTGCAACCGTCAGCAAAAGCCGCT GAACACAATCCAGTCGTTATGGTTCACGGTAT TGGAGGGGCATCATTCAATTTTGCGGGAATTA AGAGCTATCTCGTATCTCAGGGCTGGTCGCGG GACAAGCTGTATGCAGTTGATTTTAGTGACAA AACAGGCAATAACTTAAACAACGGTCCAGTAT TATCGCGTTTTGTGAAAAAGGTATTAGATGAA ACCGGTGCGAAAAAAGTGGATATTGTGCGCTCA CAGCATGGGCGGCGCTAACACGCTTTACTACA TAAAAAATTTGGATGGCGGTAATAAAATTGAA AACGTCGTAACACTTGCGGCGCGAATCGTCT TGTAACAGGCAAGGCGCTTCCGGGTACTGATC CCAACCAAAAGATCTTGTACACATCCGTTTAC AGTAGTGCTGATATGATTGTTATGAATTACTT ATCAAAATTAGACGGGGCTAAAAATGTTCAAA TTCATGGTGTCTGGACATATCGGCCTTCTGTAC AGCAGCCAAGTCAACAGCCTGATTAAAGAAGG GCTTAACGGCGGGGGCCTGAATACGAATTAA
SEQ ID NO: 17	Sgf	ATGAAATTTGTAAAAAGAAGGATCATTGCACT TGTAACAATTTTGATGCTGTCTGTTACATCGC TGTTTGCGTTGCAACCGTCAGCAAAAGCCGCT

		GAACACAATCCAGTCGTTATGGTTCACGGTAT TGGAGGGGCATCATTCAATTTTGCGGGAATTA AGAGCTATCTCGTATCTCAGGGCTGGTCGCGG GACAAGCTGTATGCAGTTGATTTCAAAGACAA GACAGGGAATAACCGCAACAATGGTCCGCGTC TATCGAGATTCGTCAAAGATGTGTTAGACAAA ACAGGAGCCAAAAAAGTAGATATTGTGGCTCA TAGTATGGGCGGAGCGAACACATTATACTATA TTAAGAATCTAGATGGTGGCGATAAAATTGAG AACGTTGTCACAATTGGTGGAGCAAACGGACT CGTTTCAAGCAGAGCATTACCAGGCACAGATC CAAATCAAAAAATTCTTTACACATCCGTCTAT AGCTCAGCAGATCTTATTGTCTCAACAGTCT CTCTCGTTTAATTGGCGCAAGAAACGTCCAAA TCCATGGCGTTGGACATATCGGTCTATTAACC TCAAGCCAAGTCAAAGGATATATTAAAGAAGG ACTGAACGGCGGGGGCCTCAATACAAATTAA
SEQ ID NO: 18	Sgh	ATGAAATTTGTAAAAAGAAGGATCCTTGCACT TGTAACAATTTTGATGCTGTCTGTTACATCGC TGTTTTCGTTGCAACCGTCAGCAAAAGCCGCT GAACACAATCCAGTCGTTATGGTTCACGGTAT TGGAGGGGCATCATTCAATTTTGCGGGAATTA AGAGCTATCTCGTATCTCAGGGCTGGTCGCGG GACAAGCTGTATGCAGTTGATTTCATTGACAA GACAGGAAATAACCGCAACAATGGTCCGCGTC TATCGAGATTCGTCAAAGATGTGTTAGACAAA ACAGGAGCCAAAAAAGTAGATATTGTGGCTCA TAGTATGGGCGGAGCGAACACATTATACTATA TTAAGAATCTAGATGGTGGCGATAAAATTGAG AACGTTGTCACAATTGGTGGAGCAAACGGACT CGTTTCAAGCAGAGCATTACCAGGCACAGATC CAAATCAAAAAATTCTTTACACATCCGTCTAT AGCTCAGCAGATCTTATTGTCTCAACAGTCT CTCTCGTTTAATTGGCGCAAGAAACGTCCAAA TCCATGGCGTTGGACATATCGGTCTATTAACC TCAAGCCTAGTCAAAGGATATATTAAAGAAGG ACTGAACGGCGGAGGCCAAAATACAAATTAA
SEQ ID NO: 19	Mt2b1	ATGAAAGTGATTTTTGTAAAGAAAGGAGTTT GCAAATTCTTGTTGCCCTTGCCCTTAGTGATAG GTTCAATGGCCTTCATCCAGCCAAAAGAAATC AAAGCAGCTGAGCACAAATCCGGTTGTGATGGT ACATGGTATTGGAGGAGCGTCTTATAACTTTG CTTCGATTAAAAGTTATTTGGTTAACCAAGGC TGGGATCGAAACCAATTATTTGCTATCGATTT CATAGACAAAACAGGGAATAACCGCAACAATG GTCCTCGTTTATCTAGATTCGTCAAAGATGTG CTAGACAAAACGGGTGCCAAAAAAGTAGATAT

		TGTGGCGCATAGTATGGGCGGGGCGAACACGC TATACTATATTAAGAATCTAGATGGCGGCGAT AAAATTGAAAACGTCGTCACCATTTGGTGGAGC AAACGGACTCGTTTCACTCAGAGCATTACCAG GAACAGATCCAAATCAAAAAATTCTCTATACA TCTGTCTATAGCTCAGCCGATTTGATTGTCTGT CAACAGCCTTTTCGCGTTTAACTGGCGCAAGAA ATGTCCTGATCCACGGCGTTGGCCATATCGGT CTATTAACCTCAAGCCAAGTGAAAGGGTATAT TAAAGAAGGACTGAACGGCGGGGGCCTAAATA CAAATTAA
SEQ ID NO: 20	H2a	ATGAAATTTGTAAAAAGAAGGATCATTGCACT TGTAACAATTTTGATGCTGTCTGTTACATCGC TGTTTGCGTTGCAACCGTCAGCAAAAGCCGCT GAACACAATCCAGTCGTTATGGTTCACGGTAT TGGAGGGGCATCATTCAATTTTGCGGGAATTA AGAGCTATCTCGTATCTCAGGGCTGGTCGCGG GACAAGCTGTATGCAGTTGATTTACAGGACAA GACAGGAAATAACCGCAACAATGGTCCGCGTC TATCTAAATTCGTCAAAGATGTGTTAGACAAA ACGGGTGCCAAAAAAGTAGATATTGTGGCTCA TAGTATGGGCGGGGCGAACACGCTATACTATA TTAAGAATCTAGATGGCGGCGATAAAATTGAG AACGTTGTCAACAATTGGCGGAGCAAACGGACT CGTTTCAAGCAGAGCATTACCAGGCACAGATC CAAATCAAAAAATTCTTTACACATCCGTCTAC AAGCTCAGCCGATCTCATTGTCTGTCACAGTC TCTCTCGTTTAAATTGGCTGCAAGAAACAGTCC AAATCCATGGCGTTGGACATATCGGTCTATTA ACCTCAAGCCAAGTCAAAGGATATATTAAAGA AGGACTGAACGGCGGGGGACTAAATACAAATT AA
SEQ ID NO: 21	lf15(G2)	TGAACACAATCCAGTTGTTATGGTTCACGGTA TTGGAGGGGCATCATTCAATTTTGCGGGAATT AAGAGCTATCTCGTATCTCAGGGCTGGTCGCG GGGCAAGCTGTATGCGGTTGATTTTTGGGACA AGACAGGGACGAATTATAACAATGGCCCGGTA TTATCGCGTTTTTGTGAAAAAGGTATTAGATGA AACGGGTGCGAAAAAAGTGGATATTGTCTGCTC ACAGCATGGGCGGCGCTAACACGCTTTACTAC ATAAAAAATCTGGACGGCGGAAATAAAGTTGA AAACGTCGTAACGCTTGGCGGCACGAACCGTT CGACGACAAGCAAGGCGCTTCCGGGAACAGAT CCAAATCAAAAGATTTTATACACATCCATTTA CAGCAGTGCCGATATGATTGTCATGAATTACT TATCAAAATTAGACGGTGCTAAAAATGTTCAA ATTCATGGCGTTGGGCACATTGGTTTATTGAT

		GAACAGCCAAGTCAACAGCCTGATTAAAGAAG GACTGAACGGCGGGGGACTCAATACGAATTGA
SEQ ID NO: 22	3C12	TGAACACAATCCAGTTGTTATGGTTCACGGTA TTGGAGGGGCATCATTCAATTTTGC GGGAATT AAGAGCTATCTCGTATCTCAGGGCTGGTCACG GGGCAAGCTGTATGCGGTTGATTTTTGGGACA AGACAGGGACGAATTATAACAATGGCCCGGTA TTATCTAGATTTCGTCAAAGATGTGCTAGACAA AACGGGTGCGAAAAAAGTGGATATTGTCGCTC ACAGCATGGGGGGCGCGAACACACTTTACTAC ATAAAAAATCTGGACGGCGGAAATAAAATTGA AAACGTCGTAACGCTTGGCGGCGCGAACCGTT CGACGACAAGCAAGGCGCTTCCGGGAACAGAT CCAAATCAAAAGATTTTATACACATCCATTTA CAGCAGTGCCGATATGATTGTCATGAATTACT TATCAAAATTAGACGGGGCTAAAAATGTTCAA ATTCATGGCGTTGGGCACATTGGTTTATTGAT GAACAGCCAAGTCAACAGCCTGATTAAAGAAG GACTGAACGGCGGGGGACTCAATACGAATTGA
SEQ ID NO: 23	3N19(G2)	TGAACACAATCCAGTTGTTATGGTTCACGGTA TTGGAGGGGCATCATTCAATTTTGC GGGAATT AAGAGCTATCTCGTATCTCAGGGCTGGTCACG GGGCAAGCTGTATGCGGTTGATTTTTGGGACA GGACAGGGACGAATTATAACAATGGCCCGGTA TTATCACGATTTGTGAAAAAGGTATTAGATGA AACCGGTGCGAAAAAAGTGGACATTGTCGCTC ACAGCATGGGTGGCGCGAACACACTTTACTAC ATAAAAAATCTGGACGGCGGAAATAAAATTGA AAACGTCGTAACGCTTGGCGGCGCGAACCGTT TGACGACAAGCAAGGCGCTTCCGGGAACAGAT CCAAATCAAAAGATTTTATACACATCCATTTA CGGCAGTGCCGATATGATTGTCATGAATTACT TATCAAAATTAGACGGTGCTAAAAACGTTCAA ATCCATGGCGTTGGGCACATTGGTTTATTGAT GAACAGCCAAGTCAACAGCCTGATTAAAGAAG GACTGAACGGCGGGGGACTGAATACAAATTGA
SEQ ID NO: 24	G2.2	TGAACACAATCCAGTTGTTATGGTTCACGGTA TCGGAGGGGCATCATTCAATTTTGC GGGAATT AAGAGCTATCTCGTATCTCAGGGCTGGTCACG GGGCAAGCTGTATGCGGTTGATTTTTGGGACA AGACAGGGACGAATTATAACAATGGCCCGGTA TTATCACGATTTGTGCAAAAGGTTTTAGACGA AACGGGTGCGAAAAAAGTGGATATTGTCGCTC ACAGCATGGGGGGCGCGAACACACTTTACTAC ATAAAAAATCTGGACGGCGGAAATAAAATTGA AAACGTCGTAACGCTTGGCGGCGCGAACCGTT CGACGACAAGCAAGGCGCTTCCGGGAACAGAT

		CCAAATCAAAAGATTTTATACACATCCATTTA CGGCAGTGCCGATATGATTGTCATGAATTACT TATCAAAATTAGACGGTGCTAAAAACGTACAA ATTCATGGCGTTGGGCACATTGGTTTATTGAT GAACAGCCAAGTCAACAGCCTGATTAAAGAAG GACTGAACGGCGGGGGGACTCAATACGAATTGA
SEQ ID NO: 25	2C3	TGAACACAATCCAGTTGTTATGGTTCACGGTA TTGGAGGGGCATCATTCAATTTTGC GGGAATT AAGAGCTATCTCGTATCTCAGGGCTGGTCGCG GGGCAAGCTGTATGCGGTTGATTTTTGGGACA AGACAGGGACGAATTATAACAATGGCCCGGTA TTATCACGATTTGTGCAAAAGGTTTTAGACGA AACGGGTGCGAAAAAAGTGGATATTGTCGCTC ACAGCATGGGCGGCGCGAACACACTTTACTAC ATAAAAAATTTGGATGGCGGTAATAAAATTGA AAACGTCGTCACCATTGGTGGAGCAAACGGAC TCGTTTTCAAGCAGAGCATTACCAGGCACAGAT CCAAATCAAAAAATTCTTTACACATCCGTCTA TAGCTCAGCAGATCTTATTGTCGTCAACAGTC TCTCTCGTTTAATTGGCGCAAGAAACGTCCAA ATCCATGGCGTTGGACATATCGGTCTATTAAC CTCAAGCCAAGTCAAAGGATATATTAAAGAAG GGCTTAACGGCGGGGGCCACAATACGAATTGA
SEQ ID NO: 26	2F11	TGAACACAATCCAGTTGTTATGGTTCACGGTA TCGGAGGAGCTTCATACAATTTTGC GGGAATT AAGAGCTATCTCGTATCTCAGGGCTGGTCACG GGGCAAGCTGTATGCGGTTGATTTTTGGGACA AGACAGGGACGAATTATAACAATGGCCCGGTA TTATCACGATTTGTGCAAAAGGTTTTAGACGA AACC GGTTGCGAAAAAAGTGGATATTGTCGCTC ACAGCATGGGTGGCGCGAACACACTTTACTAC ATAAAAAATCTGGACGGCGGAAATAAAATTGA AAACGTCGTAACGCTTGGCGGCGCGAACCGTT TGACGACAAGCAGGGCGCTTCCGGGAACAGAT CCAAATCAAAAGATTTTATACACATCCATTTA CAGCAGTGCCGATATGATTGTCATGAATTACT TATCAAAATTAGACGGTGCTAAAAACGTACAA ATTCATGGCGTTGGGCACATTGGTTTATTGAT GAACAGCCAAGTCAAAGGATATATTAAAGAAG GACTGAACGGCGGAGGCCTAAATACGAATTGA
SEQ ID NO: 27	KV11(6C7)	TGAACACAATCCAGTTGTTATGGTTCACGGTA TTGGAGGGGCATCATTCAATTTTGC GGGAATT AAGAGCTATCTCGTATCTCAGGGCTGGTCACG GGGCAAGCTGTATCCGGTTGATTTTTGGGACA AGACAGGGACGAATTATAACAATGGCCCGGTA TTATCACGATTTGTGCAAAAGGTTTTGGACGA AACGGGTGCGAAAAAAGTGGATATTGTCGCTC

		ACAGTATGGGTGGCGCGAACACACTTTACTAC ATAAAAAATCTGGACGGCGGAAATAAAATTGA AAACGTCGTAACGCTTGGCGGCGCGAACCGTT TGACGACAAGCAAGGCGCTTCCGGGTACTGAT CCCAACCAAAAGATCTTGTACACATCCGTTTA CAGTAGTGCTGATATGATTGTTATGAATTACT TATCAAAATTAGACGGGGCTAAAAATGTTCAA ATTCATGGCGTTGGGCACATTGGTTTATTGAT GAACAGCCAAGTCAACAGCCTGATTAAAGAAG GACTGAACGGCGGGGGCCATAAATACAAATTGA
SEQ ID NO: 28	KV6(3A1)	TGAACACAATCCAGTTGTTATGGTTCACGGTA TTGGAGGGGCATCATTAGTTTTCGGGAATT AAGAGCTATCTCGTATCTCAGGGCTGGTCACG GGGCAAGCTGTATGCGGTTGATTTTTGGGACA AGACAGGGACGAATTATAACAATGGCCCGGTA TTATCACGATTTGTGCAAAAGGTTTTGGACGA AACGGGTGCGAAAAAAGTGGATATTGTCGCTC ACAGTATGGGTGGCGCGAACACACTTTACTAC ATAAAAAATCTGGACGGCGGAAATAAAATTGA AAACGTCGTAACGCTTGGCGGCGCGAACCGTT TGACGACAAGCAAGGCGCTTCCGGGTACTGAT CCCAACCAAAAGATCTTGTACACATCCGTTTA CAGTAGTGCTGATATGATTGTTATGAATTACT TATCAAAATTAGACGGGGCTAAAAATGTTCAA ATTCATGGCGTTGGGCACATTGGTTTATTGAT GAACAGCCAAGTCAACAGCCTGATTAAAGAAG GACTGAACGGCGGGGGCCATAAATACAAATTGA
SEQ ID NO: 29	KV2(2D1)	TGAACACAATCCAGTTGTTATGGTTCACGGTA TCGGAGGAGCTTCATACAGTTTTCGGGAATT AAGAGCTATCTCGTATCTCAGGGCTGGTCACG GGGCAAGCTGTATGCGGTTGATTTTTGGGACA AGACAGGGACGAATTATAACAATGGCCCGGTA TTATCACGATTTGTGCAAAAGGTTTTAGACGA AACGGGTGCGAAAAAAGTGGATATTGTCGCTC ACAGCATGGGTGGCGCGAACACACTTTACTAC ATAAAAAATCTGGACGGCGGAAATAAAATTGA AAACGTCGTAACGCTTGGCGGCGCGAACCGTT TGACGACAAGCAAGGCGCTTCCGGGAACAGAT CCCAACCAAAAGATCTTGTACACATCCGTTTA CAGTAGTGCCGATATGATTGTCATGAATTACT TATCAAAATTAGACGGGGCTAAAAATGTTCAA ATTCATGGTGTTCGGACATATCGGCCTTCTGTA CAGCAGCCAAGTCAACAGCCTGATTAAAGAAG GACTGAACGGCGGGGGCCAAAAATACAAATTGA
SEQ ID NO: 30	N2.5	TGAACACAATCCAGTTGTTATGGTTCACGGTA TCGGAGGAGCTTCATACAGTTTTCGGGAATT AAGAGCTATCTCGTATCTCAGGGCTGGTCACG

		GGGCAAGCTGTATGCGGTTGATTTTTGGGACA AGACAGGGACGAATTATAACAATGGCCCGGTA TTATCACGATTTGTGCAAAAGGTTTTAGACGA AACGGGTGCGAAAAAAGTGGATATTGTCGCTC ACAGCATGGGGGCGCGAACACACTTTACTAC ATAAAAAATCTGGACGGCGGAAATAAAATTGA AAACGTCGTAACGCTTGCGGCGCGAACCGTT TGACGACAAGCAAGGCGCTTCCGGGAACAGAT CCCAACCAAAAGATCTTGTACACATCCGTTTA CAGTAGTGCTGATATGATTGTTATGAATTACT TATCAAAATTAGACGGGGCTAAAAATGTTCAA ATTCATGGCGTTGGGCACACTGGTTTATTGAT GAACAGCCAAGTCAACAGCCTGATTAAAGAAG GACTGAACGGCGGGGGCCACAATACAAATTGA
SEQ ID NO: 31	KV5(2H6)	TGAACACAATCCAGTTGTTATGGTTCACGGTA TTGGAGGAGCATCATACAATTTTGC GGGAATT AAGAGCTATCTCGTATCTCAGGGCTGGTCACG GGGCAAGCTGTATACGGTTGATTTTTGGGACA AGACAGGCACAAATTATAACAATGGCCCGGTA TTATCACGATTTGTGCAAAAGGTTTTAGACGA AACGGGTGCGAAAAAAGTGGATATTGTCGCTC ACAGCATGGGTGGCGCGAACACACTTTACTAC ATAAAAAATCTGGACGGCGGAAATAAAATTGA AAACGTCGTAACGCTTGCGGCGCGAATCGTC TTGTAACAGGCAAGGCGCTTCCGGGAACAGAT CCCAATCAAAAGATTTTGTACGCATCCGTTTA CAGCAGTGCCGATATGATTGTCATGAATTACT TATCAAAATTAGACGGTGCTAAAAACGTTCAA ATTCATGGCGTTGGGCACATTGGTTTATTGAT GAACAGCCAAGTCAACAGCCTGATTAAAGAAG GACTGAACGGCGGGGGCCTGAATACAAATTGA
SEQ ID NO: 32	3E5	TGAACACAATCCAGTCGTTATGGTTCACGGTA TTGGAGGGGCATCATTCAATTTTGC GGGAATT AGGAGCTATCTCGTATCTCAGGGCTGGTCACG GGGCAAGCTGTATGCGGTTGATTTTTGGGACA GGACAGGGACGAATTATAACAATGGCCCGGTA TTATCACGATTTGTGCAAAAGGTTTTAGATGA AACCAGGTGCGAAAAAAGTGGACATTGTCGCTC ACAGCATGGGTGGCGCGAACACACTTTACTAC ATAAAAAATCTGGACGGCGGAAATAAAATTGA AAACGTCGTAACGCTTGCGGCGCGAACCGTT TGACGACAAGCAAGGCGCTTCCGGGAACAGAT CCAAATCAAAAGATTTTATACACATCCATTTA CAGCAGTGCCGATATGATTGTCATGAATTACT TATCAAAATTAGACGGGGCTAAAAATGTTCAA ATCCATGGCGTTGGACACATCGGCCTTCTGTA CAGCAGCCAAGTCAACAGCCTGATTAAAGAAG

		GACTGAACGGCGGGGGCCTCAATACGAATTGA
SEQ ID NO: 33	G2.1	TGAACACAATCCAGTTGTTATGGTTCACGGTA TCGGAGGGGCATCATTCAATTTTGC GGGAATT AGGAGCTATCTCGTATCTCAGGGCTGGTCACG GGGCAAGCTGTATGCGGTTGATTTTTGGGACA AGACAGGGACGAATTATAACAATGGCCCGGTA TTATCACGATTTGTGCAAAAGGTTTTAGACGA AACCGGTGCGAAAAAAGTGGACATTGTCGCTC ACAGCATGGGCGGCGCTAACACGCTTTACTAC ATAAAAAATCTGGACGGCGGAAATAAAATTGA AAACGTCGTAACGCTTGGCGGCACGAACCGTT TGACGACAAGCAGGGCGCTTCCGGGAACAGAT CCAAATCAAAAGATTTTATACACATCCATTTA CAGCAGTGCCGATATGATTGTCATGAATTACT TATCAAACTAGACGGTGCTAAAAACGTTCAA ATTCATGGCGTTGGGCACATTGGTTTATTGAT GAACAGCCAAGTCAACAGCCTGATTAAAGAAG GACTGAACGGCGGGGGACTCAATACGAATTGA
SEQ ID NO: 34	3H24(G2)	TGAACACAATCCAGTTGTTATGGTTCACGGTA TTGGAGGGGCATCATTCAATTTTGC GGGAATT AAGAGCTATCTCGTATCTCAGGGCTGGTCGCG GGACAAGCCGTATGCGGTTGATTTTTGGGACA AGACAGGGACGAATTATAACAATGGCCCGGTA TTATCACGATTTGTGCAAAAGGTTTTAGACAA AACGGGTGCGAAAAAAGTGGATATTGTCGCTC ACAGCATGGGGGGCGCGAACACACTTTACTAC ATAAAAAATCTGGACGGCGGAAATAAAGTTGA AAACGTCGTAACGCTTGGCGGCGCGAACCGTT TGACGACAAGCAAGGCGCTTCCGGGAACAGAT CCAAATCAAAAGATTTTATACACATCCATTTA CAGCAGTGCCGATATGATTGTCATGAATTACT TATCAAAATTAGACGGTGCTAAAAACGTTCAA ATTCATGGCGTTGGGCACATTGGTTTATTGAT GAACAGCCAAGTCAACAGCCTGATTAAAGAAG GACTGAACGGCGGGGGACTCAATACGAATTGA
SEQ ID NO: 35	KV10(4G6)	TGAACACAATCCAGTTGTTATGGTTCACGGTA TTGGAGGGGCATCATTCAATTTTGC GGGAATT AAGAGCTATCTCGTGTCTCAGGGCTGGCCGCG GGACAAGCTGTATGCAGTTGATTTTTGGGACA AGACAGGGACGAATTATAACAATGGCCCGGTA TTATCACGATTTGTGCAAAAGGTTTTAGACGA AACGGGTGCGAAAAAAGTGGATATTGTCGCTC ACAGCATGGGTGGCGCGAACACACTTTACTAC ATAAAAAATCTGGACGGCGGAAATAAAGTTGA AAGCGTCGTAACACTTGGCGGCGCGAATCGTC TTGTAACAGGCAAGGCGCTTCCGGGAAGTAT CCCAACCAAAAGATTTTATACACATCCATTTA

		CAGCAGTGCCGATATGATTGTCATGAATTACT TATCAAAATTAGACGGTGCTAAAAACGTTCAA ATTCATGGCGTCGGACATATCGGCCTTCTGAT GAACAGCCAAGTCAACAGCCTGATTAAAGAAG GACTGAACGGCGGGGGCCACAATACAAATTGA
SEQ ID NO: 36	KV12(6D4)	TGAACACAATCCAGTTGTTATGGTTCACGGTA TCGGAGGGGGCATCATTAGTTTTCGCGGAATT AGGAGCTATCTCGTATCTCAGGGCTGGCCGCG GGACAAGCTGTATGCGGTTGATTTTTGGGACA AGACAGGCACAAATTATAACAATGGCCCGGTA TTATCACGATTTGTGCAAAAGGTATTAGATGA AACCGGTGCGAAAAAAGTGGATATTGTCGCCC ACAGCATGGGTGGCGCGAACACACTTTACTAC ATAAAAAATCTGGACGGCGGAAATAAAGTTGA AAACGTCGTGACGCTTGGCGGGCGCAACCGTT TGACGACAGGCAAGGCGCTTCCGGGTACTGAT CCCAATCAAAAGATTTTATACACATCCGTTTA CAGCAGTGCCGATATGATTGTCATGAATTACT TATCAAAATTAGACGGTGCTAAAAACGTTCAA ATTCATGGCGTTGGGCACATTGGTTTATTGAT GAACAGCCAAGTCAACAGGCTGATTAAAGAAG GACTGAACGGCGGAGGCCACAATACAAATTGA
SEQ ID NO: 37	N2.2	TGAACACAATCCAGTTGTTATGGTTCACGGTA TCGGAGGGGGCATCATTAGTTTTCGCGGAATT AGGAGCTATCTCGTATCTCAGGGCTGGCCGCG GGACAAGCTGTATGCGGTTGATTTTTGGGACA AGACAGGCACAAATTATAACAATGGCCCGGTA TTATCACGATTTGTGCAAAAGGTATTAGATGA AACCGGTGCGAAAAAAGTGGATATTGTCGCCT ACAGCATGGGTGGCGCGAACACACTTTACTAC ATAAAAAATCTGGACGGCGGAAATAAAGTTGA AAACGTCGTGACGCTTGGCGGGCGCAACCGTT TGACGACAGGCAAGGCGCTTCCGGGTACTGAT CCCAATCAAAAGATTTTATACACATCCGTTTA CAGCAGTGCCGATATGATTGTCATGAATTACT TATCAAAATTAGACGGTGCTAAAAACGTTCAA ATTCATGGCGTTGGGCACATTGGTTTATTGAT GAACAGCCAAGTCAACAGGCTGATTAAAGAAG GACTGAACGGCGGAGGCCACAATACAAATTGA
SEQ ID NO: 38	N2.3	TGAACACAATCCAGTTGTTATGGTTCACGGTA TCGGGGGGGGCATCATTAGTTTTCGCGGAATT AGGAGCTATCTCGTATCTCAGGGCTGGCCGCG GGACAAGCTGTATGCGGTTGATTTTTGGGACA AGACAGGCACAAATTATAACAATGGCCCGGTA TTATCACGATTTGTGCAAAAGGTATTAGATGA AACCGGTGCGAAAAAAGTGGATATTGTCGCCC ACAGCATGGGTGGCGCGAACACACTTTACTAC

		<p>ATAAAAAATCTGGACGGCGGAAATAAAGTTGG  AAACGTCGTGACGCTTGGCGGCGCCAACCGTT  TGACGACAGGCAAGGCGCTTCCGGGTACTGAT  CCCAATCAAAAGATTTTATACACATCCGTTTA  CAGCAGTGCCGATATGATTGTCATGAATTACT  TATCAAAATTAGACGGTGCTAAAAACGTTCAA  ATTCATGGCGTTGGGCACATTGGTTTATTGAT  GAACAGCCAAGTCAACAGGCTGATTAAAGAAG  GACTGAACGGCGGAGGCCACAATACAAATTGA</p>
SEQ ID NO: 39	N2.1	<p>TGAACACAATCCAGTTGTTATGGTTCACGGTA  TCGGAGGGGCATCATTCAAGTTTTCGCGGAATT  AGGAGCTATCTCGTATCCCAGGGCTGGCCGCG  GGACAAGCTGTATGCGGTTGATTTTTGGGACA  AGACAGGCACAAATTATAACAATGGCCCGGTA  TTATCACGATTTGTGCAAAAGGTATTAGATGA  AACCGGTGCGAAAAAAGTGGATATTGTCGCCC  ACAGCATGGGTGGCGCGAACACACTTTACTAC  ATAAAAAATCTGGACGGCGGAAATAAAGTTGA  AAACGTCGTGACGCTTGGCGGCGCCAACCGTT  TGACGACAGGCAAGGCGCTTCCGGGTACTGAT  CCCAATCAAAAGATTTTATACACATCCGTTTA  CAGCAGTGCCGATATGATTGTCATGAATTACT  TATCAAAATTAGACGGTGCTAAAAACGTTCAA  ATTCATGGCGTTGGGCACATTGGTTTATTGAT  GAACAGCCAAGTCAACAGGCTGATTAAAGAAG  GACTGAACGGCGGAGGCCACAATACAAATTGA</p>
SEQ ID NO: 40	KV4(2E12)	<p>TGAACACAATCCAGTTGTTATGGTTCACGGTA  TTGGAGGGACATCATTCAATTTTTCGCGGAATT  AAGAGCTATCTCGTATCTCAGGGCTGGTCACG  GGACAAGCTGTATGCGGTTGATTTTTGGGACA  AGACAGGGACGAATTATAACAATGGCCCGGTA  TTATCACGATTTGTGCAAAAGGTTTTAGACGA  AACGGGTGCGAAAAAAGTGGATATTGTCGCTC  ACAGCATGGGCGGCGCCAACACGCTTTACTAC  ATAAAAAATCTGGACGGCGGAAATAAAATTGA  AAACGTCGTGACGCTTGGCGGCGCGAACCGTT  TGACGACAAGCAAGGCGCTTCCGGGAACAGAT  CCAAATCAAAAGATTTTATACACATCCATTTA  CAGCAGTGCCGATATGATTGTCATGAATTACT  TATCAAAATTAGACGGTGCTAAAAACGTTCAA  ATTCATGGCGTTGGGCACATTGGTTTATTGAT  GAACAGCCAAGTCAACAGCCTGATTAAAGAAG  GACTGAACGGCGGGGGCCACAATACAAATTGA</p>
SEQ ID NO: 41	KV9(4C6)	<p>TGAACACAATCCAGTTGTTATGGTTCACGGTA  TCGGAGGGGCATCATTCAAGTTTTCGCGGAATT  AAGAGCTATCTCGTATCTCAGGGCTGGTCGCG  GGACAAGCTGTATGCAGTTGATTTTAGTGACA</p>

		AAACAGGCACGAATTATAACAATGGCCCGGTA TTATCACGATTTGTGCAAAAGGTTTTAGACGA AACGGGTGCGAAAAAAGTGGATATTGTCGCTC ACAGCATGGGGGGCGCGAACACACTTTACTAC ATAAAAAATCTGGATGGCGGTAATAAAATTGA AAACGTCGTAACACTTGGCGGCGCGAACCGTT TGACGACAAGCAAGGCGCTTCCGGGTACTGAT CCCAACCAAAAGATCTTGTACACATCCATTTA CAGCAGTGCCGATATGGTTGTCATGAATTACT TATCAAAATTAGACGGGGCTAAAAATGTTCAA ATTCATGGTGTGCGGGCACATTGGTTTTATTGAT GAACAGCCAAGTCAACAGCCTGATTAAAGAAG GACTGAACGGCGGGGGCCACAATACGAATTGA
SEQ ID NO: 42	7D6	TAAACACAATCCAGTTGTTATGGTTCACGGTA TTGGAGGGGCATCATACAATTTTGCGGGAATA AAGAGCTATCTCGTATCTCAGGGCTGGTCGCG GGACAAGCTGTATGCAGTTGATTTTAGTGACA AGACAGGGACGAATTATAACAATGGCCCGGTA TTATCACGATTTGTGCAAAAGGTTTTAGACGA AACGGGTGCGAAAAAAGTGGATATTGTCGCTC ACAGCATGGGGGGCGCGAACACACTTTACTAC ATAAAAAATCTGGACGGCGGTAATAAAATTGA AAACGTCGTAACACTTGGCGGCGCGAACCGTT TGACGACAAGCAAGGCGCTTCCGGGAACAGAT CCAAATCAAAAGATTTTATACACATCCATTTA CAGCAGTGCCGATATGATTGTCATGAATTACT TATCAAACTAGACGGTGCTAAAAACGTTCAA ATTCATGGCGTTGGGCACATTGGTTTTATTGAT GAACAGCCAAGTCAACAGCCTGATTAAAGAAG GACTGAACGGCGGGGGATTAAATACGAATTGA
SEQ ID NO: 43	3F3	TGAACACAATCCAGTTGTTATGGTTCACGGTA TTGGAGGGGCATCATTCAATTTTGCGGGAATT AAGAGCTATCTCGAATCTCAGGGCTGGTCACG GGGCAAGCTGTATGCGGTTGATTTTTGGGACA AGACCGGGACGAATTATAACAATGGCCCGGTA TTATCACGATTTGTGCAAAAGGCTTTAGACGA AACGGGTGCGAAAAAAGTGGATATTGTCGCTC ACAGCATGGGTGGCGCGAACACACTTTACTAC ATAAAAAATCTGGACGGCGGAAATAAAATTGA AAACGTCGTAACGCTTGGCGGCGCGAACCGTT TGACGACAAGCAAGGCGCTTCCGGGAACAGAT CCAAATCAAAAGATTTTATACACATCCATTTA CAGCAGTGCCGATATGATTGTCATGAATTACT TATCAAAATTAGACGGTGCTAAAAACGTTCAA ATCCATGGCGTTGGGCACATTGGTTTTATTGAT GAACAGCCAAGTCAACAGCCTGATTAAAGAAG GACTGAACGGCGGGGGCCAGAATACGAATTGA

SEQ ID NO: 44	2D11(G2)	TGAACACAATCCAGTTGTTATGGTTCACGGTA TCGGAGGGGCATCATTCAATTTTGCGGGAATT AAGAGCTATCTCGTATCTCAGGGCTGGTCACG GGGCAAGCTGTATGCGGTTGATTTTTGGGACA GGACAGGGACGAATTATAACAATGGCCCGGTA TTATCACGATTTGTGAAAAAGGTATTAGATGA AACCGGTGCGAAAAAAGTGGATATTGTCGCTC ACAGCATGGGGGGCGCGAACACACTTTACTAC ATAAAAAATCTGGACGGCGGAAATAAAATTGA AAACGTCGTCACACTTGGCGGCGCGAACCGTT CGACGACAAGCAAGGCGCTTCCGGGAACAGAT CCAAATCAAAAGATTTTATACACATCCATTTA CAGCAGTGCCGATATGATTGTCATGAATTACT TATCAAAATTAGACGGTGCTAAAAACGTTCAA ATTCATGGCGTTGGGCACATTGGTTTATTGAT GAACAGCCAAGTCAACAGCCTGATTAAAGAAG GGCTGAACGGCGGAGGCCAGAAACGAATTGA
SEQ ID NO: 45	3C23(G2)	TGAACACAATCCAGTTGTTATGGTTCACGGTA TTGGAGGGGCATCATTCAATTTTGCGGGAATT AAGAGCTATCTCGTATCTCAGGGCTGGTCGCG GGGCAAGCTGTATGCGGTTGATTTTTGGGACA GGACAGGGACGAATTATAACAATGGCCCGGTA TTATCACGATTTGTGCAAAAGGTTTTAGACGA AACGGGTGCGAAAAAAGTGGATATTGTCGCTC ACAGCATGGGGGGCGCGAACACACTTTACTAC ATAAAAAATCTGGACGGCGGAAATAAAATTGA AAACGTCGTCACACTTGGCGGCGCGAACCGTT CGACGACAAGCAAGGCGCTTCCGGGAACAGAT CCAAATCAAAAGATTTTATACACATCCATTTA CAGCAGTGCCGATATGATTGTCATGAATTACT TATCAAAATTAGACGGTGCTAAAAACGTTCAA ATTCATGGCGTTGGGCACATTGGTTTATTGAT GAACAGCCAAGTCAACAGCCTGATTAAAGAAG GGCTTAACGGCGGGGGCCACAATACGAATTGA
SEQ ID NO: 46	G2.3	TGAACACAATCCAGTCGTTATGGTTCACGGTA TTGGAGGGGCATCATTCAATTTTGCGGGAATA AAGAGCTATCTCGTATCTCAGGGCTGGTCACG GGGCAAGCTGTATGCGGTTGATTTTTGGGACA GGACAGGGACGAATTATAACAATGGCCCGGTA TTATCACGATTTGTGCAAAAGGTTTTAGACGA AACGGGTGCGAAAAAAGTGGATATTGTCGCTC ACAGCATGGGTGGCGCGAACACACTTTACTAC ATAAGAATCTGGACGGCGGAAATAAAATTGA AAACGTCGTAACGCTTGGCGGCGCGAACCGTT CGACGACAAGCAAGGCGCTTCCGGGAACAGAT CCAAATCAAAAGATTTTATACACATCCATTTA CAGCAGTGCCGATATGATTGTCATGAATTGCT

		TATCAAAATTAGACGGTGCTAAAAACGTTCAA ATTCATGGCGTTGGGCACATTGGTTTATTGAT GAACAGCCAAGTCAACAGCCTGATTAAAGAAG GACTGAACGGCGGGGGCCAGAATACGAATTGA
SEQ ID NO: 47	2A3	TGAACACAATCCAGTTGTTATGGTTCACGGTA TTGGAGGGGCATCGTTCAATTTTGCGGGAATT AAGAGCTATCTCGTATCTCAGGGCTGGTCGCG GGACAAGCTGTATGCAGTTGATTTCAAAGACA AGACAGGGACGAATTATAACAATGGCCCGGTA TTATCACGATTTGTGAAAAAGGTATTAGATGA AACGGGTGCGAAAAAAGTGGATATTGTCGCTC ACAGCATGGGCGGCGCTAACACGCTTTACTAC ATAAAGAATCTGGACGGCGGAAATAAAATTGA AAACGTCGTAACGCTTGGCGGCGCGAACCGTT CGACGACAAGCAAGGCGCTTCCGGGTACTGAT CCCAACCAAAAGATCTTGTACACATCCGTTTA CAGTAGTGCTGATATGATTGTTATGAATTACT TATCAAAATTAGACGGTGCTAAAAACGTTCAA ATTCATGGCGTTGGGCACATTGGTTTATTGAT GAACAGCCAAGTCAACAGCCTGATTAAAGAAG GACTGAACGGCGGAGGCCTAAATACAAATTGA
SEQ ID NO: 48	2F4	TGAACACAATCCAGTTGTTATGGTTCACGGTA TTGGAGGGGCATCATTCAATTTTGCGGGAATT AAGAGCTATCTCGTATCTCAGGGCTGGTCGCG GGACAAGCTGTATGCGGTTGATTTTTGGGACA AGACAGGGACGAATTATAACAATGGCCCGGTA TTATCACGATTTGTGAAAAAGGTATTAGATGA AACCGGTGCGAAAAAAGTGGATATTGTCGCTC ACAGCATGGGTGGCGCTAACACGCTTTACTAC ATAAAAAATCTGGACGGCGGCGATAAAATTGA GAACGTCGTAACACTTGGCGGCGCGAACCGTT CGACGACAAGCAAGGCGCTTCCGGGAACAGAT CCAAATCAAAGATCTTGTACACATCCGTTTA CAGTAGTGCTGATATGATTGTCATGAATTACT TATCAAAATTAGACGGTGCTAAAAACGTTCAA ATTCATGGCGTTGGGCACATTGGTTTATTGAT GAACAGCCAAGTCAACAGCCTGATTAAAGAAG GGCTGAACGGCGGAGGCCAGAATACGAATTGA
SEQ ID NO: 49	2B9(G2)	TGAACACAATCCAGTTGTTATGGTTCACGGTA TTGGAGGGGCATCATTCAATTTTGCGGGAATT AAGAGCTATCTCGTATCTCAGGGCTGGTCGCG GGACAAGCTGTATGCAGTTGATTTTTGGGGCA AGACAGGGACGAATTATAACAATGGCCCGGTA TTATCGCGTTTTGTGAAAAAGGTATTAGATGA AACGGGTGCGAAAAAAGTGGATATTGTCGCTC ACAGCATGGGGGGCGCGAACACACTTTACTAC ATAAAAAATCTGGACGGCGGAAATAAAATTGA

		AAACGTCGTAACACTTGGCGGCGCGAACCGTT CGACGACAAGCAAGGCGCTTCCGGGAACAGAT CCAAATCAAAAGATTTTATACACATCCATTTA CAGCAGTGCCGATATGATTGTCATGAATTACT TATCAAAATTAGACGGGGCTAAAAATGTTCAA ATTCATGGCGTTGGGCACATTGGTTTATTGAT GAACAGCCAAGTCAACAGCCTGATTAAAGAAG GACTGAACGGCGGAGGCCAAAATACGAATTGA
SEQ ID NO: 50	2C5	TGAACACAATCCAGTTGTTATGGTTTCACGGTA TTGGAGGGGGCATCATTCAATTTTGC GGGAATT AAGAGCTATCTCGTATCTCAGGGCTGGTCACG GGGCAAGCTGTATGCAGTTGATTTTTGGGACA AGACAGGGACGAATTATAACAATGGCCCGGTA TTATCGCGTTTTTGTGAAAAAGGTATTAGATGA AACGGGTGCGAAAAAAGTGGATATTGTCGCTC ACAGCATGGGCGGCGCTAACACGCTTTACTAC ATAAAAAATCTGGATGGCGGTAATAAAATTGA AAACGTCGTCACACTTGGCGGCGCGAACCGTT CGACGACAAGCAAGGCGCTTCCGGGAACAGAT CCCAACCAAAAGATTTTATACACATCCATTTA CAGCAGTGCCGATATGATTGTCATGAATTACT TATCAAAATTAGACGGTGCTAAAAACGTTCAA ATTCATGGCGTTGGGCACATTGGTTTATTGAT GAACAGCCAAGTCAACAGCCTGATTAAAGAAG GACTGAACGGCGGAGGCCAAAATACGAATTGA
SEQ ID NO: 51	KV1(2A6)	TGAACACAATCCAGTTGTTATGGTTTCACGGTA TTGGAGGGGGCATCATTCAATTTTGC GGGAATT AAGAGCTATCTCGTATCTCAGGGCTGGTCACG GGGCAAGCTGTATGCGGTTGATTTCAAGGACA AGACAGGCACAAATTATAACAATGGCCCGGTA TTATCACGATTTTGTGAAAAAGGTATTAGATGA AACC GGTTGCGAAAAAAGTGGATATTGTCGCTC ACAGCATGGGCGGCGCTAACACGCTTTACTAC ATAAAAAATCTGGACGGCGGAAATAAAATTGA AAACGTCGTAACGCTTGGCGGCGCGAACCGTT CGACGACAAGCAAGGCGCTTCCGGGTACTGAT CCCAACCAAAAGATTTTATACACATCCATTTA CAGCAGTGCCGATATGATTGTCATGAATTACT TATCAAAATTAGACGGTGCTAAAAACGTTCAA ATTCATGGCGTTGGGCACATTGGTTTATTGAT GAACAGCCAAGTCAACAGCCTGATTAAAGAAG GGCTTAACGGCGGGGGCCAGAATACGAATTGA
SEQ ID NO: 52	2D13(G2)	TAAACACAATCCAGTTGTTATGGTTTCACGGTA TTGGAGGGGGCATCATTCAATTTTGC GGGAATT AAGAGCTATCTCGTATCTCAGGGCTGGTCGCG GGACGAGCTGTATGCGGTTGATTTTTGGGACG AGACAGGGACGAATTATAACAATGGCCCGGTA

		TTATCACGATTTGTGCAAAAGGTTTTAGACGA AACCGGTGCGAAAAAAGTGGATATTGTCGCTC ACAGCATGGGTGGCGCGAACACACTTTACTAC ATAAAAAATCTGGACGGCGGAAATAAAATTGA AAACGTCGTAACGCTTGGCGGCGCGAACCGTT CGACGACAAGCAAGGCGCTTCCGGGTACAGAT CCAAATCAAAAGATTTTATACACATCCATTTA CAGCAGTGCCGATATGATTGTCATGAATTACT TATCAAAATTAGACGGTGCTAAAAATGTTCAA ATTCATGGCGTTGGGCACATTGGTTTATTGAT GAACAGCCAAGTCAACAGCCTGATTAAAGAAG GGCTGAACGGCGGAGGCCAAAATACGAATTGA
SEQ ID NO: 53	3C8	TGAACACAATCCAGTTGTTATGGTTCACGGTA TCGGAGGGGCATCATTCAATTTTGC GGGAATT AAGAGCTATCTCGTATCTCAGGGCTGGTCGCG GGACAAGCTGTATGCGGTTGATTTTTGGGACA AGACAGGGACGAATTATAACAATGGCCCGGTA TTATCACGATTTGTGCAAAAGGTTTTAGACGA AACGGGTGCGAAAAAAGTGGATATTGTCGCTC ACAGCATGGGTGGCGCGAACACACTTTACTAC ATAAAAAATCTGGACGGCGGAAATAAAGTTGA AAACGTCGTAACACTTGGCGGCGCGAATCGTT CGACGACAAGCAAGGCGCTTCCGGGAACAGAT CCAAATCAAAAGATTTTATACACATCCATTTA CAGCAGTGCCGATATGATTGTCATGAATTACT TATCAAAATTAGACGGTGCTAAAAACGTTCAA ATTCATGGCGTTGGGCACATTGGTTTATTGAT GAACAGCCAAGTCAACAGCCTGATTAAAGAAG GACTGAACGGCGGGGGCCAAAATACAAATTGA
SEQ ID NO: 54	2D5	TGAACACAATCCAGTTGTTATGGTTCACGGTA TCGGAGGGGCATCATTCAATTTTGC GGGAATT AAGAGCTATCTCGTATCTCAGGGCTGGTCACG GGGCAAGCTGTATGCGGTTGATTTTTGGGACA AGACAGGGACGAATTATAACAATGGCCCGGTA TTATCACGATTTGTGCAAAAGGTTTTAGACGA AACGGGTGCGAAAAAAGTGGATATTGTCGCTC ACAGCATGGGTGGCGCGAACACACTTTACTAC ATAAAAAATCTGGACGGCGGAAATAAAATTGA AAACGTCGTAACACTTGGCGGCGCGAACCGTT CGACGACAAGCAAGGCGCTTCCGGGAACAGAT CCAAATCAAAAGATTTTATACACATCCATTTA CAGCAGTGCCGATATGATTGTCATGAATTACT TATCAAAATTAGACGGTGCTAAAAATGTTCAA ATTCATGGCGTTGGGCACATTGGTTTATTGAT GAACAGCCAAGTCAACAGCCTGATTAAAGAAG GGCTGAACGGCGGAGGACAAAATACAAATTGA

SEQ ID NO: 55	405 (pumilus)	MKFVKRRIIALVTILVLSVTSFLFAMQPSAKAA EHNPVVMVHGIGGASYNFAGIKSYLVSQGWSR GKLYAVDFWDKTGTNYNNGPVLSRFVQKVLDE TGAKKVDIVAHSMGGANTPYYIKNLDGGNKIE NVVTLGGANRSTTSKALPGTDPNQKILYTSIY SSADMIVMNYLSKLDGAKNAQIHGVGHIGLLM NSQVNSLIKEGLNGGGQNTN
SEQ ID NO: 56	406 (subtilis)	MKFVKRRIIALVTILMLSVTSFLFALQPSAKAA EHNPVVMVHGIGGASFNFAGIKSYLVSQGWSR DKLYAVDFWDKTGTNYNNGPVLPFRVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKVA NVVTLGGANRLTTGKALPGTDPNQKILYTSIY SSADMIVINYLSRLDGARNVQIHGVGHIGLLY SSQVNSLIKEGLNGGGGLNTN
SEQ ID NO: 57	402 (megaterium)	MKFVKRRIIALVTILVLSVTSFLFAMQPSAKAA DTIQLLWFTGIGGASYNFAGIKSYLVSQGWSR GKLYAVDFWDKTGTNYNNGPVLSRFVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRLTTSKALPGTDPNQKILYTSIY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNSLIKEGLNGGGGHNTN
SEQ ID NO: 58	400 (lentus)	MKFVKRRIIALVTILVLSVTSFLFAMQPSAKAA EHNPVVMVHGIGGASYNFAGIKSYLVSQGWSR GKLYAVDFWDKTGTNYNNGPVLSRFVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRLTTSKALPGTDPNQKILYTSIY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNSLIKEGLNGGGGLNTN
SEQ ID NO: 59	396 (circulans)	MKFVKRRIIALVTILVLSVTSFLFAMQPSAKAA EHNPVVMVHGIGGASYNFAGIKSYLVSQGWSR GKLYAVDFWDKTGTNYNNGPVLSRFVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRLTTSKALPGTDPNQKILYTSIY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNSLIKEGLNGGGGLNTN
SEQ ID NO: 60	392 (azotoformans)	MKFVKRRIIALVTILVLSVTSFLFAMQPSAKAA EHNPVVMVHGIGGASYNFAGIKSYLVSQGWSR GELYAVDFWDKTGTNYNNGPVLSRFVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRLTTSKALPGTDPNQKILYTSIY SSANMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNSLIKEGLNGGGGLDTN
SEQ ID NO: 61	398 (firmus)	MKFVKRRIIALVTILVLSVTSFLFAMQPSAKAA EHNPVVMVHGIGGASYNFAGIKSYLVSQGWSR GKLYAVDFWDKTGTNYNNGPVLSRFVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRLTTSKALPGTDPNQKILYTSIY

		SSADMIVMNYLSKLDGAKNAQIHGVGHIGLLM NSQVNSLIKEGLNGGGHNTN
SEQ ID NO: 62	393 (badius)	MKFVKRRIIALVTILVLSVTSLFAMQPSAKAA EHNPPVVMVHGIGGASYNFAGIKSYLVSQGWSR GKLYAVDFWDKTGTNYNNGPVLSRFVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRLTTSKALPGTDPNQKILYTSIY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNSLIKEGLNGGGHNTN
SEQ ID NO: 63	Dc5h	MKFVKRRIIALVTILMLSVTSLFALQPSAKAA EHNPPVVMVHGIGGASFNFAGIKSYLVSQGWSR DKLYAVDFKDKTGTNYNNGPVLSRFVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKVE NVVTLGGANRLTTGKALPGTDPNQKILYTSIY SSADMIVMNYLSRLDGARNVQIHGVGHIGLLY SSQVNSLIKEGLNGGGGLNTN
SEQ ID NO: 64	Dc5f	MKFVKRRIIALVTILMLSVTSLFALQPSAKAA EHNPPVVMVHGIGGASFNFAGIKSYLVSQGWSR DKLYAVDFXDKTGNNRNNGPRLSRFVKDVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGDKIE NVVTIGGANGLVSSRALPGTDPNQKILYTSVY SSADLIVVNSLSRLIGARNLIHGVGHIGLLT SSQVKGYIKEGLNGGGGLNTN
SEQ ID NO: 65	Dc5c1	MKVIFVKRSLQILVALALVLGSIQFIQPKA KAAEHNPPVVMVHGMGGASYNFASIKRYLVSQG WDQNQLFAIDFIDKTGNNLNNGPRLSRFVKDV LAKTGAKKVDIVAHSMGGANTLYYIKNLDGGD KIENVVTLGGANGLVSLRALPGTDPNQKILYT SVYSSADLIVVNSLSRLIGARNVLIHGVGHIG LLTSSQVKGYIKEGLNGGGQNTN
SEQ ID NO: 66	Dc5a2	MKVIFVKRSLQILVVLALVMGSMQFIQPKA RAAEHNPPVVMVHGMGGASYNFASIKSYLVSQG WDRNQLFAIDFIDKTGNNRNNGPRLSRFVKDV LAKTGAKKVDIVAHSMGGANTLYYIKNLDGGD KIENVVTLGGANGLVSLRALPGTDPNQKILYT SVYSSADLIVVNSLSRLIGARNVLIHGVGHIG LLASSQVKGYIKEGLNGGGQNTN
SEQ ID NO: 67	Dc512	MKVIFVKRSLQILIALALVIGSMQFIQPKA KAAEHNPPVVMVHGIGGASYNFFSIKSYLATQG WDRNQLYAIDFIDKTGNNRNNGPRLSRFVKDV LDKTGAKKVDIVAHSMGGANTLYYIKNLDGGD KIENVVTIGGANGLVSSRALPGTDPNQKILYT SVYSSADLIVVNSLSQFNWRKKHPDPGVGHIG LLTSSQVKGYIKEGLNGGGGLNTN
SEQ ID NO: 68	Sga	MKFVKRRIIALVTILMLSVTSLFALQPSAKAA EHNPPVVMVHGIGGASFNFAGIKSYLVSQGWSR DKLYAVDFRDKTGNNLNNGPVLSRFVKKVLDE

		TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRLVTGKALPGTDPNQKILYTSVY SSADMIVMNYLTKLDGAKNVQIHGVGHIGLLY SSQVNSLIKEGLNGGGLNTN
SEQ ID NO: 69	Sgc	MKFVKRRIIALVTILMLSVTSLFALQPSAKAA EHNPVVMVHGIGGASFNFAGIKSYLVSQGWSR DKLYAVDFWDKTGNNLNNGPVLSRFVKKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRLVTGKALPGTDPNQKILYTSVY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLY SSQVNSLIKEGLNGGGLNTN
SEQ ID NO: 70	Sgd	MKFVKRRIIALVTILMLSVTSLFALQPSAKAA EHNPVVMVHGIGGASFNFAGIKSYLVSQGWSR DKLYAVDFSDKTGNNLNNGPVLSRFVKKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRLVTGKALPGTDPNQKILYTSVY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLY SSQVNSLIKEGLNGGGLNTN
SEQ ID NO: 71	Sgf	MKFVKRRIIALVTILMLSVTSLFALQPSAKAA EHNPVVMVHGIGGASFNFAGIKSYLVSQGWSR DKLYAVDFDKDTGNNRNNGPRLSRFVKDVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGDKIE NVVTIGGANGLVSSRALPGTDPNQKILYTSVY SSADLIVVNSLSRLIGARNVQIHGVGHIGLLT SSQVKGYIKEGLNGGGLNTN
SEQ ID NO: 72	Sgh	MKFVKRRILALVTILMLSVTSLFALQPSAKAA EHNPVVMVHGIGGASFNFAGIKSYLVSQGWSR DKLYAVDFIDKTGNNRNNGPRLSRFVKDVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGDKIE NVVTIGGANGLVSSRALPGTDPNQKILYTSVY SSADLIVVNSLSRLIGARNVQIHGVGHIGLLT SSLVKGYIKEGLNGGGQNTN
SEQ ID NO: 73	Mt2b1	MKVIFVKRSLQILVALALVIGSMAFIQPKIE KAAEHNPNVVMVHGIGGASYNFASIKSYLVNQ WDRNQLFAIDFIDKTGNNRNNGPRLSRFVKDV LDKTGAKKVDIVAHSMGGANTLYYIKNLDGGD KIENVVTIGGANGLVSLRALPGTDPNQKILYT SVYSSADLIVVNSLSRLTGARNVLIHGVGHIG LLTSSQVKGYIKEGLNGGGLNTN
SEQ ID NO: 74	H2a	MKFVKRRIIALVTILMLSVTSLFALQPSAKAA EHNPNVVMVHGIGGASFNFAGIKSYLVSQGWSR DKLYAVDFRDKTGNNRNNGPRLSKFVKDVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGDKIE NVVTIGGANGLVSSRALPGTDPNQKILYTSVY KLSRSHCRQQSLSFNWLQETVQIHGVGHIGLL TSSQVKGYIKEGLNGGGLNTN

SEQ ID NO: 75	1f15(G2)	EHNPVVMVHGIGGASFNFAGIKSYLVSQGWSR GKLYAVDFWDKTGTNYNNGPVLSRFVKKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKVE NVVTLGGTNRSTTSKALPGTDPNQKILYTSIY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNSLIKEGLNGGGLNTN
SEQ ID NO: 76	3C12	EHNPVVMVHGIGGASFNFAGIKSYLVSQGWSR GKLYAVDFWDKTGTNYNNGPVLSRFVKDVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRSTTSKALPGTDPNQKILYTSIY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNSLIKEGLNGGGLNTN
SEQ ID NO: 77	3N19(G2)	EHNPVVMVHGIGGASFNFAGIKSYLVSQGWSR GKLYAVDFWDRGTGTNYNNGPVLSRFVKKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRLTTSKALPGTDPNQKILYTSIY GSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNSLIKEGLNGGGLNTN
SEQ ID NO: 78	G2.2	EHNPVVMVHGIGGASFNFAGIKSYLVSQGWSR GKLYAVDFWDKTGTNYNNGPVLSRFVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRSTTSKALPGTDPNQKILYTSIY GSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNSLIKEGLNGGGLNTN
SEQ ID NO: 79	2C3	EHNPVVMVHGIGGASFNFAGIKSYLVSQGWSR GKLYAVDFWDKTGTNYNNGPVLSRFVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTIGGANLVSSRALPGTDPNQKILYTSVY SSADLIVVNSLSRLIGARNVQIHGVGHIGLLT SSQVKGYIKEGLNGGGHNTN
SEQ ID NO: 80	2F11	EHNPVVMVHGIGGASYNFAGIKSYLVSQGWSR GKLYAVDFWDKTGTNYNNGPVLSRFVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRLTTSRALPGTDPNQKILYTSIY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVKGYIKEGLNGGGLNTN
SEQ ID NO: 81	KV11(6C7)	EHNPVVMVHGIGGASFSFAGIKSYLVSQGWSR GKLYPVDFWDKTGTNYNNGPVLSRFVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRLTTSKALPGTDPNQKILYTSVY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNSLIKEGLNGGGLNTN
SEQ ID NO: 82	KV6(3A1)	EHNPVVMVHGIGGASFSFAGIKSYLVSQGWSR GKLYAVDFWDKTGTNYNNGPVLSRFVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRLTTSKALPGTDPNQKILYTSVY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM

		NSQVNSLIKEGLNGGGLNTN
SEQ ID NO: 83	KV2(2D1)	EHNPPVVMVHGIGGASYSFAGIKSYLVSQGWSR GKLYAVDFWDKTGTNYNNGPVLRSFVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRLTTSKALPGTDPNQKILYTSVY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLY SSQVNSLIKEGLNGGGQNTN
SEQ ID NO: 84	N2.5	EHNPPVVMVHGIGGASYSFAGIKSYLVSQGWSR GKLYAVDFWDKTGTNYNNGPVLRSFVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRLTTSKALPGTDPNQKILYTSVY SSADMIVMNYLSKLDGAKNVQIHGVGHTGLLM NSQVNSLIKEGLNGGGHNTN
SEQ ID NO: 85	KV5(2H6)	EHNPPVVMVHGIGGASYNFAGIKSYLVSQGWSR GKLYTVDFWDKTGTNYNNGPVLRSFVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRLVTGKALPGTDPNQKILYASVY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNSLIKEGLNGGGLNTN
SEQ ID NO: 86	3E5	EHNPPVVMVHGIGGASFNFAGIRSYLVSQGWSR GKLYAVDFWDRGTGTNYNNGPVLRSFVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRLTTSKALPGTDPNQKILYTSIY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLY SSQVNSLIKEGLNGGGLNTN
SEQ ID NO: 87	G2.1	EHNPPVVMVHGIGGASFNFAGIRSYLVSQGWSR GKLYAVDFWDKTGTNYNNGPVLRSFVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGTNRLTTSRALPGTDPNQKILYTSIY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNSLIKEGLNGGGLNTN
SEQ ID NO: 88	3H24(G2)	EHNPPVVMVHGIGGASFNFAGIKSYLVSQGWSR DKPYAVDFWDKTGTNYNNGPVLRSFVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKVE NVVTLGGANRLTTSKALPGTDPNQKILYTSIY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNSLIKEGLNGGGLNTN
SEQ ID NO: 89	KV10(4G6)	EHNPPVVMVHGIGGASFNFAGIKSYLVSQGWPR DKLYAVDFWDKTGTNYNNGPVLRSFVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKVE SVVTLGGANRLVTGKALPGTDPNQKILYTSIY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNSLIKEGLNGGGHNTN
SEQ ID NO: 90	KV12(6D4)	EHNPPVVMVHGIGGASFNFAGIRSYLVSQGWPR DKLYAVDFWDKTGTNYNNGPVLRSFVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKVE NVVTLGGANRLTTGKALPGTDPNQKILYTSVY

		SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNRLIKEGLNGGGHNTN
SEQ ID NO: 91	N2.2	EHNPVVMVHGIGGASFSFAGIRSYLVSQGWPR DKLYAVDFWDKTGTNYNNGPVL SRFVQKVLDE TGAKKVDIVAYSMGGANTLYYIKNLDGGNKVE NVVTLGGANRLTTGKALPGTDPNQKILYTSVY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNRLIKEGLNGGGHNTN
SEQ ID NO: 92	N2.3	EHNPVVMVHGIGGASFSFAGIRSYLVSQGWPR DKLYAVDFWDKTGTNYNNGPVL SRFVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKVG NVVTLGGANRLTTGKALPGTDPNQKILYTSVY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNRLIKEGLNGGGHNTN
SEQ ID NO: 93	N2.1	EHNPVVMVHGIGGASFSFAGIRSYLVSQGWPR DKLYAVDFWDKTGTNYNNGPVL SRFVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKVE NVVTLGGANRLTTGKALPGTDPNQKILYTSVY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNRLIKEGLNGGGHNTN
SEQ ID NO: 94	KV4(2E12)	EHNPVVMVHGIGGTSFNFAGIKSYLVSQGWSR DKLYAVDFWDKTGTNYNNGPVL SRFVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRLTTSKALPGTDPNQKILYTSIY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNSLIKEGLNGGGHNTN
SEQ ID NO: 95	KV9(4C6)	EHNPVVMVHGIGGASFSFAGIKSYLVSQGWSR DKLYAVDFS DKTGTNYNNGPVL SRFVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRLTTSKALPGTDPNQKILYTSIY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNSLIKEGLNGGGHNTN
SEQ ID NO: 96	7D6	KHNPVVMVHGIGGASYNFAGIKSYLVSQGWSR DKLYAVDFS DKTGTNYNNGPVL SRFVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRLTTSKALPGTDPNQKILYTSIY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNSLIKEGLNGGGLNTN
SEQ ID NO: 97	3F3	EHNPVVMVHGIGGASFNFAGIKSYLESQGWSR GKLYAVDFWDKTGTNYNNGPVL SRFVQKALDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRLTTSKALPGTDPNQKILYTSIY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNSLIKEGLNGGGQNTN
SEQ ID NO: 98	2D11(G2)	EHNPVVMVHGIGGASFNFAGIKSYLVSQGWSR GKLYAVDFWDRGTGTNYNNGPVL SRFVKKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE

		NVVTLGGANRSTTSKALPGTDPNQKILYTSIY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNSLIKEGLNGGGQNTN
SEQ ID NO: 99	3C23(G2)	EHNPVVMVHGIGGASFNFAGIKSYLVSQGWSR GKLYAVDFWDRGTGTNYNNGPVLSRFVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRSTTSKALPGTDPNQKILYTSIY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNSLIKEGLNGGGHNTN
SEQ ID NO: 100	G2.3	EHNPVVMVHGIGGASFNFAGIKSYLVSQGWSR GKLYAVDFWDRGTGTNYNNGPVLSRFVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRSTTSKALPGTDPNQKILYTSIY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNSLIKEGLNGGGQNTN
SEQ ID NO: 101	2A3	EHNPVVMVHGIGGASFNFAGIKSYLVSQGWSR DKLYAVDFKDKTGTNYNNGPVLSRFVKKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRSTTSKALPGTDPNQKILYTSVY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNSLIKEGLNGGGGLNTN
SEQ ID NO: 102	2F4	EHNPVVMVHGIGGASFNFAGIKSYLVSQGWSR DKLYAVDFWDKTGTNYNNGPVLSRFVKKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGDKIE NVVTLGGANRSTTSKALPGTDPNQKILYTSVY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNSLIKEGLNGGGQNTN
SEQ ID NO: 103	2B9(G2)	EHNPVVMVHGIGGASFNFAGIKSYLVSQGWSR DKLYAVDFWGKTGTNYNNGPVLSRFVKKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRSTTSKALPGTDPNQKILYTSIY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNSLIKEGLNGGGQNTN
SEQ ID NO: 104	2C5	EHNPVVMVHGIGGASFNFAGIKSYLVSQGWSR GKLYAVDFWDKTGTNYNNGPVLSRFVKKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRSTTSKALPGTDPNQKILYTSIY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNSLIKEGLNGGGQNTN
SEQ ID NO: 105	KV1(2A6)	EHNPVVMVHGIGGASFNFAGIKSYLVSQGWSR GKLYAVDFKDKTGTNYNNGPVLSRFVKKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRSTTSKALPGTDPNQKILYTSIY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNSLIKEGLNGGGQNTN
SEQ ID NO: 106	2D13(G2)	KHNPVVMVHGIGGASFNFAGIKSYLVSQGWSR DELYAVDFWDETGTNYNNGPVLSRFVQKVLDE

09905666 " 071301

		TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRSTTSKALPGTDPNQKILYTSIY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNSLIKEGLNGGGQNTN
SEQ ID NO: 107	3C8	EHNPVVMVHGIGGASFNFAGIKSYLVSQGWSR DKLYAVDFWDKTGTNYNNGPVLSRFVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKVE NVVTLGGANRSTTSKALPGTDPNQKILYTSIY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNSLIKEGLNGGGQNTN
SEQ ID NO: 108	2D5	EHNPVVMVHGIGGASFNFAGIKSYLVSQGWSR GKLYAVDFWDKTGTNYNNGPVLSRFVQKVLDE TGAKKVDIVAHSMGGANTLYYIKNLDGGNKIE NVVTLGGANRSTTSKALPGTDPNQKILYTSIY SSADMIVMNYLSKLDGAKNVQIHGVGHIGLLM NSQVNSLIKEGLNGGGQNTN